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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/744,656	03/15/2001	Torsten Mangold	1475	3419

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EXAMINER

GONZALEZ, JULIO C

ART UNIT PAPER NUMBER

2834

DATE MAILED: 05/30/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/744,656

Applicant(s)

MANGOLD ET AL.

Examiner

Julio C. Gonzalez

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 19-23 is/are pending in the application.
- 4a) Of the above claim(s) 23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 19-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 March 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

- I. Claims 1-8, drawn to starter generator, classified in class 310, subclass 52.
 - II. Claims 9-18, drawn to method of making a starter generator, classified in class 29, subclass 596.
1. Applicant's election with traverse of group I in Paper No. 10 is acknowledged. The traversal is on the ground(s) that both of the base claim have the same elements. This is not found persuasive because since eventhough both basic claims may have the same elements, the base claims disclose a layered stator and a rotor. Many motors and generators of completely different fields have such limitations. Moreover, Group I is an invention about a cooling device while Group II is about a method of how the parts of the generator are made (claims 12, 15, 16, 18). It is not necessary for a generator to be made as claim in Group I to have such procedure been disclosed in Group II.

The requirement is still deemed proper and is therefore made FINAL.

Drawings

✓ 2. The drawings are objected to under 37 CFR 1.83(b) because they are incomplete. 37 CFR 1.83(b) reads as follows:

When the invention consists of an improvement on an old machine the drawing must when possible exhibit, in one or more views, the improved portion itself, disconnected from the old structure, and also in another view, so much only of the old structure as will suffice to show the connection of the invention therewith.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

✓ 3. The drawings are objected to under 37 CFR 1.83(a) because they fail to show clearly how the gear ball or bell is made or forms part of the cooling system. From figure 5, it seems like if the gear ball/bell is just another wall with a different name and it is difficult to visualize a gear next forming part of cooling wall as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

X 4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the layered metal sheets joined together as disclosed in claim 1 and the hub and the sensor ring as disclosed in claim 2 and the knurling on the tubes as disclosed in claim 22 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

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A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

X 5. The drawings are objected to because claim 5 discloses the cooling system on the interior of the stator, but from figure 3, it seems like if the cooling system is outside the stator. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-8 and 19-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

X { In claim 1, what is meant by the structural elements? What are these elements?

The rotor? The stator? Other elements?

✓ { In claim 2, can the elements only include a sensor ring since it may be

“individually”? What is meant by having the elements “individually or combined”?

✓ In claim 3, what is considered a “bore pattern”?

X { In claims 5, 6, the cooling system is disclosed to be in the interior of the stator, yet, the cooling system is on the “outer edge of the stator”? Is the cooling system on the interior or exterior part of the stator?

✓ { Also, regarding claim 6, a gear ball is disclosed, yet the specifications refer to a gear bell? Which one is it? What is considered a gear ball?

X { In claim 20, what is considered a “short-circuit bar” and a “short-circuit ring”?

Are these devices just shape of the stator with unusual names? What are the devices short-circuiting? What the short-circuiting has to do with the cooling device?

In claim 22, the claim has the same numeral numbers as claim 21. Claim 21 is numbered two times. It will be assume in this office action that applicant entered five new claims instead of four claims.

In order to advance prosecution in the merits, the Prior Art will be applied as best understood by the examiner.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1, 3, 5 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Watanabe et al.

Watanabe discloses a generator with a riveted laminated stator 1 (see figure 1), a rotor and a cooling system (see figure 3).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe in view of Takano.

Watanabe discloses a generator with a riveted laminated stator 1 (see figure 1), a rotor and a cooling system (see figure 3).

However, Watanabe does not disclose using a ring sensor.

On the other hand, Takano disclose for the purpose of improving the electrical connections of the armature, a sensor ring 33 (see figure 5).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design a generator as disclosed by Watanabe and to modify the invention by using a sensor ring for the purpose of improving the electrical connections of the armature as disclosed by Takano.

12. Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe in view of Oda et al.

Watanabe discloses a generator with a riveted laminated stator 1 (see figure 1), a rotor and a cooling system (see figure 3).

However, Watanabe does not disclose using a sealing for the cooling system.

On the other hand, Oda teaches that a paint sealing can be used for a cooling system for the purpose of avoiding leaks (column 14, lines 10-13).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design a generator as disclosed by Watanabe and to modify the invention by using a sealing means for the purpose of avoiding leaks as disclosed by Oda et al.

13. Claims 4, 20, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe in view of Fakult et al.

Watanabe discloses a generator with a riveted laminated stator 1 (see figure 1), a rotor and a cooling system (see figure 3).

However, Watanabe does not disclose that the cooling tubes may be place on recesses on a part of the stator.

On the other hand, Fakult discloses for the purpose improving the performance of electrical machines, a cooling tube 242 with a knurling ends (see figure 19), which cooling tubes are inserted in the stator (see figure 11). Moreover, a short-circuit ring 124 and short-circuit bar 112 are disclosed.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design a generator as disclosed by Watanabe and to modify the invention by using cooling tubes for the purpose improving the performance of electrical machines as disclosed by Fakult.

Application/Control Number: 09/744,656
Art Unit: 2834

Page 9

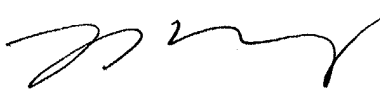
14. In regards to claim(s) 23, the method of making the device is not germane to the issue of patentability of the device itself. Therefore this limitation has not been given patentable weight and will not be considered.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julio C. Gonzalez whose telephone number is (703) 305-1563. The examiner can normally be reached on M-F (8AM-5PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 305-1341 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.


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Jcg

May 24, 2002